

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A computer program product stored on at least one tangible media encoding a computer program for executing on a computer system a computer process for generating, before execution of an application requested by a client, a customized library for execution of ~~[[an]]~~ the requested application by ~~[[a]]~~ the client, the client including one or more client-loaded types already loaded on the client, the computer process comprising:

receiving ~~[[a]]~~ an application request for the application not loaded on the client;

identifying one or more application-referenced types developed by third parties on which the application depends for execution but which are not part of the application;

~~identifying one or more client-needed types required by the client to execute the application, client-needed types comprise one or more of the application-referenced types that are not client-loaded types;~~

identifying the one or more client-loaded types;

comparing the one or more application-referenced types to the one or more client-loaded types to identify one or more client-needed types, wherein client-needed types comprise one or more application-referenced types that are not client-loaded types;

generating the customized library, including the one or more client-needed types; and

separately sending the customized library and the application to the client for execution.

2.(Original) The computer program product of claim 1 wherein the operation of generating a customized library comprises:

inserting only client-needed types into the customized library.

3. Cancelled

4. (Original) The computer program product of claim 1 wherein the operation of identifying one or more application-referenced types comprises:

identifying a version identifier of at least one of an application-referenced type and a client-needed type.

5. Cancelled

6. (Original) The computer program product of claim 1 wherein operation of generating a customized library comprises:

excluding from the customized library one or more non-identified types, each non-identified type not being referenced by the application.

7. (Original) The computer program product of claim 1 wherein the operation of identifying one or more application-referenced types comprises:

examining the application to identify one or more type references, each type reference being associated with an application-referenced type; and

generating a dependency list identifying the one or more application-referenced types, based on the one or more type references.

8. (Original) The computer program product of claim 7 wherein the operation of generating a dependency list comprises:

recursively examining an application-referenced type to identify one or more additional type references referenced by the application-referenced type; and

adding the one or more additional type references to the dependency list.

9. (Currently Amended) The computer program product of claim 1 wherein the operation of identifying comparing the one or more application-referenced types to the one or more client-types to identify one or more client-needed types comprises:

~~identifying the one or more client-loaded types; and~~

generating a client composite list to identify the one or more client-needed types, the one or more client-needed types including the one or more application-referenced types not loaded on the client.

10. (Original) The computer program product of claim 9 wherein the operation of generating a client composite list comprises:

determining whether a new version of an application-referenced type is needed by the client, based on a versioning policy.

11. (Original) The computer program product of claim 9 wherein the operation of identifying one or more client-loaded types comprises:

accessing a client catalog specifying the one or more client-loaded types loaded on the client; and

examining the client catalog to identify the one or more client-loaded types.

12. (Original) The computer program product of claim 1 wherein the operation of identifying one or more client-needed types comprises:

identifying the one or more client-loaded types by receiving a list of the client-loaded types from the client; and

evaluating the client-loaded types against the application-referenced types to identify the client-needed types.

13. (Original) The computer program product of claim 1 wherein the operation of identifying one or more client-needed types comprises:

receiving a client composite list specifying the one or more application-referenced types not loaded on the client.

14. (Original) The computer program product of claim 1 wherein the operation of generating a customized library comprises:

creating a new library containing no types; and
adding each of the one or more client-needed types to the new library to provide the customized library.

15. (Original) The computer program product of claim 14 wherein the adding operation comprises:

adding one or more global data fields of each client-needed type to the new library.

16. (Original) The computer program product of claim 14 wherein the adding operation comprises:

adding a method signature corresponding to a method of each client-needed type to the new library; and

adding a code body associated with the method of each client-needed type to the new library.

17. (Original) The computer program product of claim 16 wherein the operation of adding a method signature comprises:

adding to the new library metadata describing the method.

18. (Original) The computer program product of claim 1 wherein an application-referenced type includes a class.

19. (Previously Presented) The computer program product of claim 1 wherein an application-referenced type includes at least one of a method, a class, a data field, or a resource.

20. (Previously Presented) The computer program product of claim 1 wherein a client-loaded type includes at least one of a method, a class, a data field, or a resource.

21. (Original) The computer program product of claim 1 wherein the computer process further comprises:

receiving a device profile specifying a characteristic of the client; and

excluding an attribute from the customized library, if the attribute is incompatible with the characteristic of the client.

22. (Previously Presented) The computer program product of claim 1 wherein the computer process further comprises:

- receiving a device profile specifying a characteristic of the client;
- identifying more than one client-needed type candidate, based on the client-needed types identified in the operation of identifying the one or more client-needed types; and
- selecting one of the client-needed type candidates based on the characteristic identified in the device profile to provide one of the client needed types.

23. Cancelled

24. (Currently Amended) A customized library management system for managing a customized class library, the system comprising:

- an application server module receiving an application request and transmitting a requested application to a client; and
- a customized library generator identifying application-referenced types, the customized library generator also creating a customized library before execution of the requested application by the client and separately sending the customized library to the client, the customized library including one or more client-needed types, which are application-referenced types developed by third parties not loaded on the client but required by the application to execute.

25. Cancelled

26. (Currently Amended) A customized library management system for separately receiving a customized library associated with an application, the system comprising:

- a catalog identifying one or more client-loaded types that are loaded on a client;
- a filter module comparing the catalog to a list of one more application-referenced types, which are developed by third parties and required by the application to execute, and generating a client composite list to identify one or more client-needed types, the client-needed types ~~comprise~~ comprising one or more of the application-referenced-types that are not client-loaded types;
- a customized library generator loading the client-needed types from the client composite list into the customized library before execution of the application by the client; and

a client receipt module for separately receiving the customized library and the application.

27. (Original) The customized library management system of claim 26 further comprising:

a client request module requesting the application from a server.

28. Cancelled

29. (Original) The customized library management system of claim 26 wherein the catalog comprises:

an application identifier associated with the application loaded on the client.

30. (Original) The customized library management system of claim 26 wherein the catalog further comprises:

dependency information identifying a client-loaded type referenced by the application.

31. (Original) The customized library management system of claim 26 wherein the catalog further comprises:

an install point indicator associated with the application.

32. (Original) The customized library management system of claim 26 wherein the catalog comprises:

a type identifier associated with a client-loaded type; and

dependency information associated with the type identifier and identifying one or more client-loaded applications referencing the client-loaded type.

33. (Original) The customized library management system of claim 26 wherein the catalog comprises:

dependency information recording a reference count of one or more applications referencing the client-loaded type.

34 – 49. Cancelled

50. (New) A computer program product stored on at least one tangible media encoding a computer program for executing on a server computer system a computer process for generating, before execution of an application requested by a client, a customized library for execution of the requested application by the client, the client including one or more client-loaded types already loaded on the client, the computer process comprising:

receiving an application request for the application not loaded on the client;

identifying one or more application-referenced types developed by third parties on which the application depends for execution but which are not part of the application;

sending a list of the one or more application-referenced types;

receiving a client composite list of the client-needed types, wherein client-needed types comprise one or more application-referenced types that are not client-loaded types;

generating the customized library, including the one or more client-needed types from the client composite list; and

separately sending the customized library and the application to the client for execution.

51. (New) A computer program product stored on at least one tangible media encoding a computer program for executing on a client computer system a computer process for receiving, before execution of an application requested by a client, a customized library for execution of the requested application by the client, the client including one or more client-loaded types already loaded on the client, the computer process comprising:

sending an application request for the application not loaded on the client;

receiving a list of application-referenced types for the application;

comparing the list of application-referenced types to a catalog of the one or more client-loaded types;

determining one or more client-needed types, wherein the one or more client-needed types are application-referenced types that are not client-loaded types;

creating a client composite list including the one or more client-needed types;

sending the client composite list;

receiving the customized library, including the one or more client-needed types in the client composite list;

separately receiving the application; and

executing the application.